

An Exploratory Study on the Effect of Macroeconomic Indicators on the Stock Market Performance among 6-ASEAN Countries

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Abstract: The stock market's performance has been impacted by the global economy's recovery from the COVID-19 pandemic. This study investigates the impact of various factors on stock market performance, with a focus on the global economic recovery from the COVID-19 pandemic. The stock market has experienced positive growth, driven by low interest rates, ample liquidity, and sustained investor optimism, despite concerns over rising inflation and interest rates. This research aims to analyze stock market performance across six ASEAN countries, using a range of data sources, including historical stock prices, financial reports, and macroeconomic indicators. The findings reveal that the real exchange rate exerts the most significant influence on stock market performance. The insights from this study provide valuable information for investors, policymakers, and government bodies, aiding in strategic decision-making and investment planning in these markets.

Keywords: *Stock Market Performance, Macroeconomic Indicators, Real Exchange Rate, Inflation Rate.*

1. Introduction

Scholars from all over the world have studied how stock market performance affects firm's investment in their respective countries. The stock market has a wide range of effects on businesses in an economy. There can be plenty of effects with daily movements across the Board. When gross domestic product (GDP hereafter) grows, businesses produce more and usually expand. The creation of liquidity by stock markets can have an impact on economic activity. Many profitable investments require a long-term commitment of capital, yet investors are typically hesitant to hand over control of their savings for longer periods. This is because many profitable investments require a long-term commitment of capital. From the mid-1980s to the mid-1990s, global stock market capitalization increased by \$10.5 trillion. The value traded for emerging markets increased as well, from less than 3 percent of the global total in 1985 to 17 percent of the global total in 1994. The global stock market capitalization increased by 33 percent between 2000 and 2009. According to the Organization for Economic Co-operation and Development (OECD hereafter) estimates, emerging markets will account for nearly 60 percent of global GDP by 2030. As a result, research on emerging markets will become increasingly important in the future (Biedny, 2012). Recently, studies on how macroeconomic indicators affect stock market performance have focused on various variables like inflation, interest rates, and exchange rates, which remain crucial in shaping investor sentiment and stock market volatility.

Additionally in the year 2024, rising inflation, changes in interest rates, and geopolitical tensions are expected to play pivotal roles in determining stock market performance. The U.S. and global economies face persistent inflationary pressures, despite efforts to stabilize prices, and any deviation in central bank policy, such as interest rate cuts or increases, could significantly impact market performance. Key indicators like real GDP growth, consumer price index (CPI) inflation, and global trade policies remain influential factors in market movements. Thus, the slowdown in economic growth, coupled with geopolitical risks such as the Ukraine conflict, continues to affect investor confidence and stock market dynamics globally, Ullah, M., et al. (2023).

Various factors can have an impact on stock market performance. However, information asymmetry has emerged as the most serious issue, as it can negatively impact firm investment decisions. In general, Because of the proliferation of information made possible by the internet, there is now increased information transparency, which helps to address the issue of information inequality that exists among investors. There is a large body of research that supports the idea that investors might benefit from using a variety of data sources to determine

the worth of a company. These data sources include news stories, public announcements, and analyst reports (Chen & Wu, 2022). The terminology used in this study includes independent variables (IVs hereafter) such as exchange rate, interest rates, inflation rate, economic growth, and money supply, as well as stock market performance. Stock market performance is treated as a dependent variable in this study. This means that the changes in stock market performance influenced by how the other variables are react in current economic condition.

This study focuses on the causal relationship between macroeconomic indicators toward stock market performance in the selected 6 ASEAN Countries. The countries that have been chosen were Malaysia, Indonesia, Singapore, Thailand, the Philippines, and Myanmar. The reason is these countries have experienced significant economic growth over the past few decades. These nations are key emerging markets, attracting substantial foreign investment due to their expanding economies and rising middle-class, Mehar (2022). Moreover, the ASEAN economies are highly sensitive to global economic shocks, including fluctuations in interest rates and exchange rates, making them valuable case studies for understanding how global macroeconomic changes can impact local stock markets (Deng, Lin, Guo, Pan, 2023). Not only that but other factors may be stated as issues that affect the stock market performance. The stock market has challenges with daily movements across the board, which can have many effects. Many market experts focus their attention on the S&P 500 Index as a measure of overall market health and, consequently, as one of the most important factors in market behavior.

The performance of the stock market is a topic that is almost addressed every day in the news. When it comes to the causal relationship between the performance of the stock market and the variables that affect the economy as a whole, the problem gets challenging. Every investment option will affect the performance of the stock market. Hence, it will be difficult to make such choices if there is a problem with the factors that influence stock market performance. But how does the relationship between the macroeconomic indicators and the performance of the stock market compare to that of other countries? The answer to this question will be connected to variables such as the exchange rate, interest rates, inflation rate, economic growth, and money supply, all of which will have an impact on the performance of the stock markets in six ASEAN countries.

2. Literature Review

Stock Market

To build publicly traded businesses Naik & Padhi (2012) stated that they must raise money from several investors. As a result, the stock market is regarded as a source of long-term funding. Additionally, it offers investors various investments to use their excess income into use. The study further, mentions that before investing money, investors should closely examine the performance of the stock market by keeping an eye on the composite market index. Verma and Bansal (2021) conducted a systematic review focusing on the impact of macroeconomic variables like GDP, inflation, interest rates, and foreign direct investment (FDI) on stock markets in both developed and emerging economies. They highlighted how variables like interest rates negatively affected stock performance, while GDP and FDI showed positive correlations.

The Relationship Between Exchange Rate and Stock Market Performance: Empirical data indicates a positive correlation between the exchange rate and the volatility of the US stock market. The works of Shapiro (1975) serve as examples of this. It is also shown that the market values and competitiveness of the firms are directly affected by the exchange rate. Both Agrawal et al (2010) and Aggarwal (1981) report a positive relationship between exchange rates and volatility in the stock market.

Over the course of the 1995–2001 period, researchers (Ramasamy & Yeung, 2002) identified the relationships between foreign exchange and stock markets as well as the implications those relationships have for capital controls in six different Asian countries, including Bangladesh, Japan, the Philippines, Vietnam, China, and Indonesia. In their analysis of six Asian markets (Bangladesh, Japan, Philippines, Vietnam, China, and Indonesia), they found inconsistent results for the bivariate causality between exchange rates and stock prices (T, 2021). The study also found a positive link between stock returns and currency values. Research by Adjasi and Biekpe (2006) indicates that stock price volatility in these six Asian economies is influenced by relative currency movements.

A study done by Bhargava and Konku (2023) investigates how fluctuations in exchange rates of major currencies affect the returns of the US stock market, specifically the S&P 500 index. Utilizing various statistical models, including GARCH, the authors found that Volatility in currencies like the Australian dollar, Canadian dollar, and euro significantly influences stock market returns. The article emphasizes the need for further research into how these relationships may evolve during financial crises. Therefore, multiple studies have found a positive correlation between exchange rate and stock market performance thus making it consistent with the theoretical findings as stated earlier in the research.

The Relationship Between Interest Rate and Stock Market Performance: Lee (1997) examined the relationship between the stock market and the interest rate on short-term loans using rolling regressions over three years. He used the difference between the returns on the stock market and the risk-free short-run interest rate to forecast the excess returns on the Standard and Poor's 500 index. Despite this, he discovered that the connection became unstable with time. Gradually, the link transforms from one that is strongly negative to one that is either non-existent or even positive, however weak. According to (Fama, 1981) predicted actual activity, which in turn is favorably related to stock market gains, is adversely correlated with expected inflation.

The connection between the yield spread and stock market returns was researched by Campbell & Shiller (1991). According to him, the same characteristics that are used to forecast larger returns in the term structure also anticipate excess stock performance. As a result, he concludes that it would be beneficial to analyze the returns on bills, bonds, and stocks all at the same time. His research demonstrates that the structure term of interest rates is a trustworthy indicator of excess returns on the stock market, as his studies have shown. The relationship between these two is that interest rates could affect future earnings growth and it will lead to the performance of the stock market becoming downturn. For example, there will be less economic growth when the government raises interest rates. Due to the higher returns offered by bonds, certificates of deposit, and other investments, equities may underperform when interest rates rise. Investors in stocks are less likely to drive up stock values when interest rates rise because future earnings appear to be less valuable compared to bonds that currently provide more appealing returns says Rob Haworth, senior investment strategy director at U.S. Bank Wealth Management. Thus, the hypothesized relationship between interest rate and stock market performance is consistent with the theoretical findings.

A study done by Thorbeke (2023) about the connection between interest rates and stock market performance, especially in light of recent economic disruptions brought on by the COVID-19 outbreak looks into how stock market volatility was affected by U.S. monetary policy tightening, which involved raising interest rates, during the post-pandemic recovery. The results imply that, because tighter policies increased uncertainty, investors' views of policy changes had a major impact on stock market performance.

The Relationship Between Inflation Rate and Stock Market: According to the interview done by Limpanithiwat & Rungsombudpornkul (2010) for their research, there is a conventional opinion regarding the relationship of the inflation-stock price. From the interview responses, investors were classified into several groups, this includes investors who take inflation into account to maintain their purchasing power and investors who slow down their investment when the inflation rate increases.

According to several studies that employ a broad range of methodologies, there is a very large positive relationship between indices of inflation rate and the performance of the stock market. This relationship has been found to exist. In general, economies that have financial systems that are more advanced Experience higher levels of real activity and faster rates of growth than economies that have financial systems that are less advanced. It is possible to observe this considerable and favorable association between measures of the progression of the inflation rate and the development of the stock market.

The cross-sectional relationship between inflation and the stock market using time-averaged data from a large number of nations over multiple decades has been used to study the relationship. In addition, Boyd, Levine & Smith (2001) research suggests that inflation and the growth of the banking sector and equity market activity have a substantial negative link. This is because there is a nonlinear relationship. The marginal effects on inflation rate and stock market growth rapidly decline as inflation rises. There is a noticeable decline in banking sector performance for nations with inflation rates higher than 15 percent. Lastly, the data shows that a higher

nominal equity return does not match higher inflation in low-inflation countries, in high-inflation economies nominal stock returns move almost exactly in line with marginal inflation increases. Therefore, the hypothesized relationship between inflation rate and stock market performance does not coincide with the theoretical findings as there is a negative relationship between these two variables.

Ongoing studies continue to explore the dynamic relationship between inflation and stock market performance, utilizing various models and empirical approaches. For example, the study using the stock duration model examines how inflation and real interest rates influence stock prices over time. The model integrates factors such as growth rate sensitivity and equity market risk premiums, providing insights into how inflationary pressures affect the valuation of stocks, especially those listed in major indices like the DJIA and NASDAQ (Eldomiaty, Saeed, Hammam, & AboulSoud, 2020). Another latest study provides empirical evidence from sub-Saharan Africa, showing that financial markets, including stock exchanges, are vital for economic growth, particularly when combined with innovations in financial systems (Chikwira & Mohammed, 2023).

The Relationship Between Economic Growth and Stock Market: Singh & Weisse (1998) contest the idea that stock markets are likely to stifle economic growth because of their proneness to market collapse. They contend that for a variety of reasons, stock market improvements are unlikely to help emerging nations achieve faster industrialization and long-term economic growth in the 1980s and 1990s. First, the high degree of cyclicity in share prices makes them ineffective as signals for resource allocation. Second, stock markets frequently encourage short-term gains rather than enabling company management to take a long-term approach to investing. Third, the dominance of stock markets may diminish the contribution that the banking sector makes to boosting the economies of developing nations, notably those in East and Southeast Asia.

According to Harris (1997) research on 49 nations spanning the years 1980 to 1991, there is no discernible link between the stock market and economic growth. He applies the two-stage least squares method, dividing the sample size into developed and less developed nations. According to empirical findings, the stock market in rich nations may have some explanatory power, but in emerging nations, there does not seem to be a strong correlation between the stock market and economic growth.

The arguments made by Harris (1997) and Singh (2012), however, opine otherwise. Singh (1998) concentrates his study on developing nations and aims to comprehend how stock markets contributed to long-term economic growth in the 1980s and 1990s. He concludes that long-term economic growth in developing nations does not indicate a dependence on the stock market. The volatility and arbitrage process will result in insufficient investment allocation, which is one of the key causes of this scenario. Additionally, the way that the stock and currency markets respond to bad economic shocks will change how macroeconomic variables remain stable. Long-term economic growth would be hampered as a result. Thus, the hypothesized relationship between economic growth and stock market performance is against the theoretical findings.

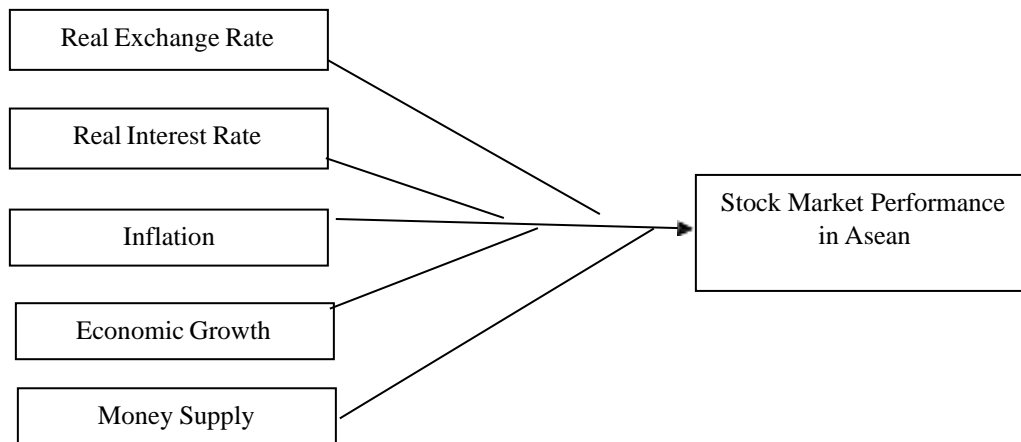
Recent research continues to explore the relationship between stock market development and economic growth across various regions. For instance, the latest study on Zimbabwe highlights how stock market liquidity has a positive association with economic growth, especially in volatile economies, though it doesn't always drive growth directly in every context. Policymakers are encouraged to focus on regulatory frameworks to enhance market liquidity for boosting economic activities, (Chikwira & Mohammed, 2023). Additionally, G20 countries have been analyzed, revealing that stock market development tends to spur growth when there are robust financial reforms. These studies underscore that while stock markets are critical to growth, the exact nature of the relationship can vary depending on regional contexts and the broader financial environment (Pradhan, 2018).

The Relationship Between Money Supply and Stock Market: The relationship between money supply and stock prices that might affect the stock market performance has been examined in many studies. The turning points in a stock price index were compared to the turning points in the growth rate of money (Sprinkel, 1965). He concluded that a bear market in the stock market was likely to occur 15 months after each peak in monetary growth and that a bull market in the stock market was likely to occur two months after each monetary trough was reached.

The complex relationship between the amount of money in circulation and the performance of the stock market has been the subject of a great deal of empirical research. While some studies have established a strong link between the money supply and stock prices, others have not (Ghazali & Yakob, 1998). The correlation between the money supply and the performance of the stock market can be influenced by several such as interest rates, inflation, economic growth, and consumer confidence. The connection can change over time and between different nations. It can also be impacted by monetary policy choices and other macroeconomic issues. A monetarist viewpoint suggests that a rise in the amount of money leads to an increase in the money supply, which in turn results in a surplus of money that can be used to buy stocks. Eventually, higher demand will result in higher stock prices (Fisher, 1911). Henceforth, the hypothesized relationship between money supply and stock market performance corresponds with the theoretical findings. According to Tobin's Q theory, people will start to spend when the MS grows. This situation will stimulate the demand for the stocks. When the demand for stocks increases, the stock price (returns) would also increase, ceteris paribus, Jamaludin, Ismail & Ab Manaf, (2017).

Combining all factors, the following theoretical framework is being proposed.

Figure 1: The Theoretical Framework



3. Methodology

This study considered panel samples, where data was collected from 2010–2022. For the purpose of this study. The variables that will be considered in this study are Stock market performance as the dependent variable and independent variables are exchange rate, interest rate, inflation, economic growth, and money supply.

Model Specification

This research study makes use of time research since it is concerned with data that is related to time-series data. Consequently, it applies time to research. By developing the study with the help of time series, it is feasible to make predictions about future data while simultaneously eliminating outliers that would disclose the underlying signal if one were to use a particular software system that was connected to time series data. As a result, this line of inquiry can be categorized as a time series because we are compiling and making use of statistical and historical data for each variable that was collected during a variety of periods. The model specifications for this study are taken from Jamaludin, Ismail & Ab Manaf (2017) who look at the relationship between macroeconomic variables and stock market return. Therefore, the model specifications to see the impact of macroeconomic indicators on stock market performance are as follows:

$$Y_{it} = \alpha_0 + \beta_1 INER_t + \beta_2 LNIR_t + \beta_3 LNGDP_t + \beta_4 LNM2_t + \beta_5 LNCPI_t + \mu_t$$

To analyze or quantify the relationship and magnitude of the impact between independent variables (real exchange rate, real interest rate, inflation rate, economic growth, and money supply) and dependent variables (stock market performance), the method of analysis applied was the regression approach. To analyze or quantify the relationship and magnitude of the impact between independent variables (exchange rate, interest

rate, inflation rate, economic growth, foreign direct investment, and money supply) and dependent variables (stock market performance) the method of analysis applied was the regression approach.

The points at which the criterion variables change as the predictor variable changes are represented by the regression coefficients ($i=1, 2, \dots, n$). There aren't many jargon that are useful for comprehending multiple regression. To assess the impact of the predictor factors on the criterion variables, these terms, like the beta value, are stated in terms of standard deviation. R evaluates how closely the values of the criterion variables predict and observe each other. The R square, often known as R^2 , which is the square of the measure of association, displays the extent of overlap between the predictor factors and the criterion variables. An estimated R^2 estimate if you used this model on a different set of data. The multiple regression rule of thumb states that for the result to be more accurate, there must be at least two independent variables. In terms of sampling size, it is recommended that each independent variable in the data set analysis have at least 30 or, for security, 100 samples.

Data and Sources

For this study, most of the data come from the World Bank for all economic variables that we found including exchange rate, interest rate, inflation rate, foreign direct investment, economic growth, and money supply. The data we are using for this research spans 2010 through 2022. The details are shown below:

Table 1: Definition and sources of the variables

VARIABLES	PROXY	REFERENCE	UNIT	DATA SOURCES
Dependent Variable				
	Stock Market Index:			
	KLCI			
	JKSESGXPSEI			
Stock Market Performance	VNINDEXYSX	(Satrugan Sinah,2017)	Annual percentage	World Bank
Independent Variable				
Real ExchangeRate	REER	(Bekti Setroyani,2020)	Annual percentage	World Bank
Real Interest Rate	REIR	(Ari Christianti,2020)	Annual percentage	World Bank
Inflation Rate	CPI	(Schwarzer, 2018)	Annual percentage	World Bank
Economic Growth	GDP	(Abraham, 2018)	Annual percentage	World Bank
Money Supply	M2	(Aulia Richman, 2019)	Annual percentage	World Bank

Diagnostic Test

In the process of modeling time series, one of the most typical steps is called diagnostic checking. This stage involves putting a calibrated model through a variety of statistical tests to check that the model accurately reflects the observed time series. The execution of this procedure allows for the identification of any potential problems that may emerge throughout the test. Several different approaches may be taken to guarantee that the entirety of the model is significant.

Variance Inflation Factor (VIF) Procedure

A variance inflation factor (VIF Procedure) is a metric that may be used in multiple regression models to assess the degree to which the model's independent variables indicate multicollinearity. Detecting multicollinearity is essential because, even though multicollinearity does not diminish the ability of the model to explain phenomena, it does lessen the statistical significance of the model's independent variables. A high VIF on an

independent variable shows that it has a strongly collinear relationship to the other variables, which is something that should be accounted for or taken into consideration while designing the structure of the model and choosing which variables will be independent.

$$\text{VIF} = \frac{1}{1 - R_i^2}$$

(1)

A rule of thumb when understanding the variance inflation factor is as follows:

1 = not correlated.

Between 1 and 5 = moderately correlated.

Greater than 5 = highly correlated. (O'Brien, 2007)

The VIF must be increased for the regression result to be decreased. As a result, the discussion centers on the minimum size of the VIF that must exist for there to be implications. Some publications suggest adopting more conservative criteria after you reach the range of and above, but a VIF that is greater than 10 indicates a significant correlation, which might be concerning (Potters, 2022).

Serial Correlation Test

It determines how a variable's historical values relate to its current value by measuring the connection between the two. If two variables are serially connected, it suggests that one of them is not completely random (Drukker, 2003). Technical analysts verify the lucrative patterns of an asset or group of securities and identify the risk associated with investing possibilities. Serial correlation, also known as the "Durbin-Watson Statistic," is the correlation that exists between a certain variable and a lagging version of itself over a variety of different periods. This correlation is referred to as "serial." Measuring the link between the two determines the degree to which the historical values of a variable are related to the value of the variable at present. If there is a serial correlation between a variable and other variables, then it is possible that the variable in question is not random.

$$DW = \frac{\sum_{t=2}^T (e_t - e_{t-1})^2}{\sum_{t=1}^T e_t^2}$$

In the Durbin-Watson test, the following hypotheses will be tested, King et al. (1995).

H0 = no first-order autocorrelation.

H1 = first-order correlation exists (for a first-order correlation, the lag is a one time unit).

A test statistic, with a value ranging from 0 to 4, is provided by the Durbin-Watson test, which reports:

2 is no autocorrelation.

0 to <2 is positive autocorrelation (common in time series data).

>2 to 4 is negative autocorrelation (less common in time series data).

These relationships are capable of existing in either a positive or negative state of serial correlation at any given time. When the serial correlation is positive, it indicates that there is a difference in value between the current price of a security and future prices and that this difference in value is likely to be equivalent to the fluctuation in the price value that occurred between the past and the present prices. When the serial correlation is negative, it indicates that there is no difference in value between the current price of a security and future prices. This occurrence takes place whenever there is a favorable connection between the two tiers of prices. On the other hand, negative serial correlation is a depiction of the value changes that will occur between current prices and future prices since it is more likely to move in the opposite direction than to move in the same direction as current prices (Banton, 2021).

4. Results and Discussion

Table 2 summarizes the results from the fitting model as described in the equation above. The results were discussed by referring to the E-views data collected. The results were obtained based on ordinary least square multiple regression analysis by each country. The results indicated that the value of R² is different between each selected country due to the characteristics of the data. Only the Philippines shows the R² value of 0.913 which means that 91.3 percent variation of stock market performance can be explained by total variation in selected explanatory variables, while the coefficient of R² for Malaysia is 0.335 indicating that 33.5% variation of stock market performance can be explained by total variation in the selected explanatory variable. Additionally, the presented all models are free from the presence of autocorrelation as the value of Durbin Watson is above two indicated negative autocorrelation.

Table 2: Regression Result

Countries/ variables	Malaysia	Indonesia	Singapore	Philippines	Vietnam	Myanmar
LNER	1.968 (1.456)	0.038 (0.098)	5.016 (1.625)	4.618*** (11.054)	-3.387*** (4.605)	-0.328** (-2.706)
LNIR	0.741** (2.427)	0.180 (0.711)	-0.488 (-1.205)	-0.243 (-1.325)	-1.056*** (-3.635)	0.087 (0.526)
LNCPI	0.417 (1.310)	0.661* (1.885)	0.453* (1.873)	0.443* (1.813)	0.050 (0.3711)	-0.121 (-0.943)
LNGDP	-0.524 (-1.282)	-0.485 (-0.925)	-0.228 (-0.710)	-0.079 (-0.299)	-2.001*** (-2.641)	0.320 (0.882)
LNM2	-0.105 (-0.761)	0.4854 (1.056)	0.5854 (1.062)	0.072 (1.136)	0.561 (1.528)	0.165 (1.259)
C	-7.577 (-0.741)	1.903 (0.470)	-13.928 (-0.899)	12.676*** (5.765)	41.029*** (4.605)	-1.246 (-0.385)
R-squared	0.335	0.168	0.154	0.913	0.4905	0.444
D-Watson	2.266	1.680	2.580	0.690	2.957	2.547
F-Statistic	2.418	1.2706	1.144	46.60	6.017	3.835

t statistics in parentheses, p<0.10* p<0.05**, p<0.01***

To study the relationship between macroeconomic indicators and stock market performance, five hypotheses have been developed. As shown in Table 2, the hypothesis testing analysis of H1 indicated that the relationship between ER and stock market returns is positively and statistically significant only for the Philippines. Hence, for Vietnam and Myanmar, the result is negative and statistically significant. This result was quite similar to research conducted by Wongbangpo and Sharma (2002) who revealed that stock prices in Indonesia, Malaysia, and the Philippines were positively related to ER. Other studies in Pakistan by Gul and Khan (2013) and in Iran by Khodaparasti (2014) also found a positive significant relationship between ER and stock market returns.

The hypothesis testing analysis of H2 indicated that the relationship between stock market returns and interest rate is positively and statistically significant for Malaysia only meanwhile for Vietnam the relationship against and statistically significant. Therefore, the alternate hypothesis, H1 is accepted which shows that interest rate has a causal effect on stock market performance. The hypothesis testing analysis of H3 showed that there is a significant association between CPI and stock market returns in the 3 selected ASEAN countries which are Indonesia, Singapore, and the Philippines. The result revealed that there was a significant positive relationship between CPI as a proxy for inflation rate toward the stock market returns. Thus, the alternate hypothesis H3 is accepted. This finding was consistent with the previous studies.

The result showed that there is a negative and statistically insignificant association between GDP and stock market returns using KLCI indices in the 4 countries. Thus, the alternate hypothesis is rejected meaning that GDP does not have any influence on the stock returns. Difference results were shown in Vietnam and Myanmar.

Vietnam shows a negative and statistically significant association between GDP and stock market returns while Myanmar is insignificant.

The result revealed that there was a positive linkage between M2 and stock market returns. The relationship between M2 and Islamic stock market returns was insignificant for all selected countries. Only Malaysia found a negative relationship and insignificant. This means that M2 does not have any influence on the stock returns. This is consistent with the previous study of a positive and statistically insignificant linkage between M2 and the stock index. For instance, Talla (2013) found that the stock market returns of the Stockholm Stock Exchange (OMXS30) were positively related to the MS but failed to show a significant result.

5. Conclusion

In conclusion, based on our analysis of the six ASEAN countries, the variables that have the highest level of significance are the exchange rate and interest rate. Therefore, it is proven that exchange rate and interest rate have a strong relationship with stock market performance. It portrays that only these variables have a significant relationship with stock market performance in Malaysia, Indonesia, the Philippines, Vietnam, and Myanmar. The relationship above explains that if interest and exchange rates increase at a particular rate, stock market performance would be affected at the same time. However, Singapore does not have any positive relationship or correlation between the independent variables and its stock market performance as we do not have enough evidence to reject all the null hypotheses. All of the variables show an insignificant relationship with the stock market performance of Singapore. The implications of a research study refer to the practical and real-world consequences or outcomes that are likely to result from the findings and conclusions of the study. In other words, the implications of a research study highlight what the results mean for different stakeholders and how they can be applied to improve the status quo.

The Central Bank plays a crucial role as a policymaker in regulating and influencing the financial markets. As the regulator of the monetary and financial systems, the Central Bank has the power to determine the interest rate, money supply, and overall stability of the economy. The stock performance research is significant to the Central Bank in the sense that it provides valuable information and insights on the current state of the financial markets, which can be used to make informed decisions that can impact the overall economic stability. One of the key aspects that the Central Bank examines when conducting stock performance research is the stock market index. The stock market index is an indicator of the performance of the overall stock market and is used to gauge the overall economic conditions. If the stock market index is rising, it is a sign that the economy is growing, and the Central Bank may consider raising interest rates to curb inflation. On the other hand, if the stock market index is falling, the Central Bank may consider lowering interest rates to stimulate economic growth.

Another important factor that the Central Bank considers when conducting stock performance research is the level of volatility in the stock market. High levels of volatility in the stock market can indicate that investors are becoming more risk-averse and that there is increased uncertainty.

In the financial markets. This can impact the Central Bank's decision-making processes, as it may consider implementing measures to stabilize the financial markets. The study's design or methodology flaws or other shortcomings are those that affected or influenced how the results of the research were interpreted. The following would be some of the study's limitations at the time the research was conducted. The focus of future research on the stock market performance can vary based on current trends, advancements, and emerging technologies. However, some general directions for future research in stock market performance include. It is important to note that these are just a few examples and the focus of future research on the stock market performance may vary based on the specific needs of the financial industry.

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